

# Napa-Sonoma Marshes Wildlife Area 2017 California Least Tern Nesting Season Results

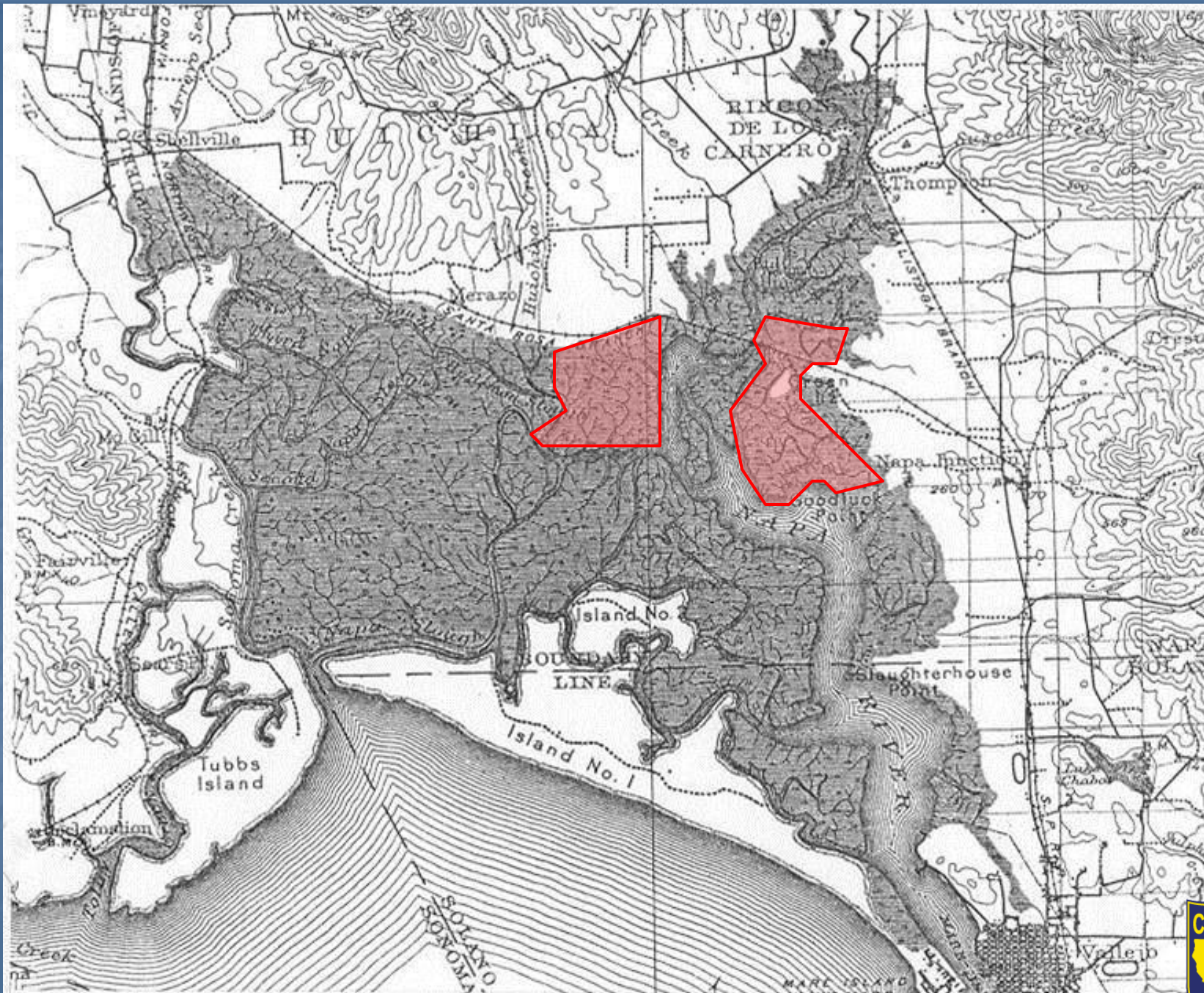


**Karen C. Taylor**

**California Department Fish and Wildlife  
NSMRG Meeting  
December 7, 2017**



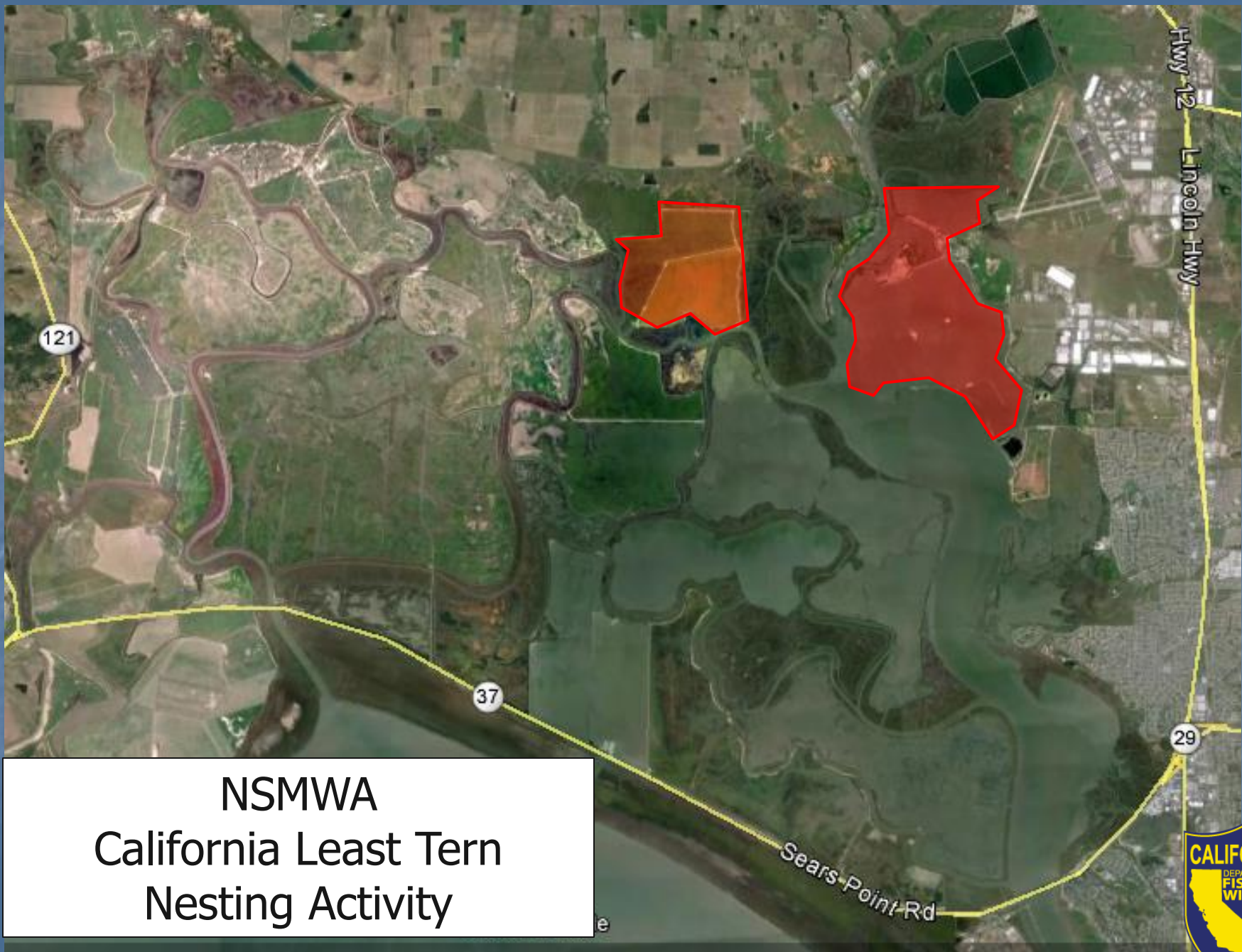




A 1907 USGS map of the San Pablo Baylands, the estuary of the Napa River.







NSMWA  
California Least Tern  
Nesting Activity





## 2017 Pond 7/7A LETE Nesting Activity



© 2017 Google



# Pond 7/7A Levee

## November 2016



# Pond 7/7A Levee (HAAR 6)-April 2015





# Pond 7/7A Levee (HAAR 6)-November 2017



# **Pond 7/7A Levee (HAAR 3)-March 2017**





# **Pond 7/7A Levee (HAAR 3)-November 2017**



Otter



Common Raven

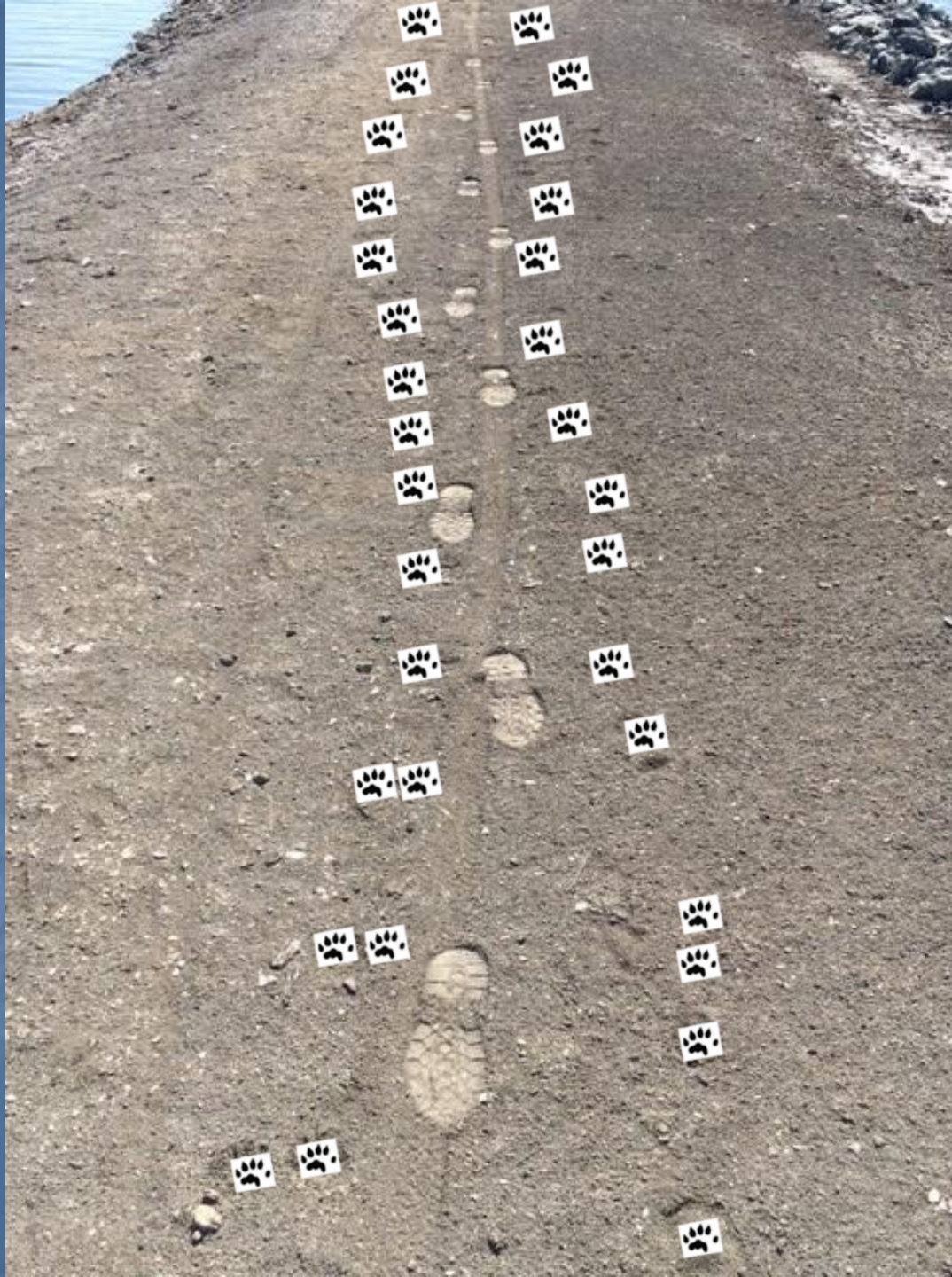


Peregrine Falcon



American Pelican and Gulls













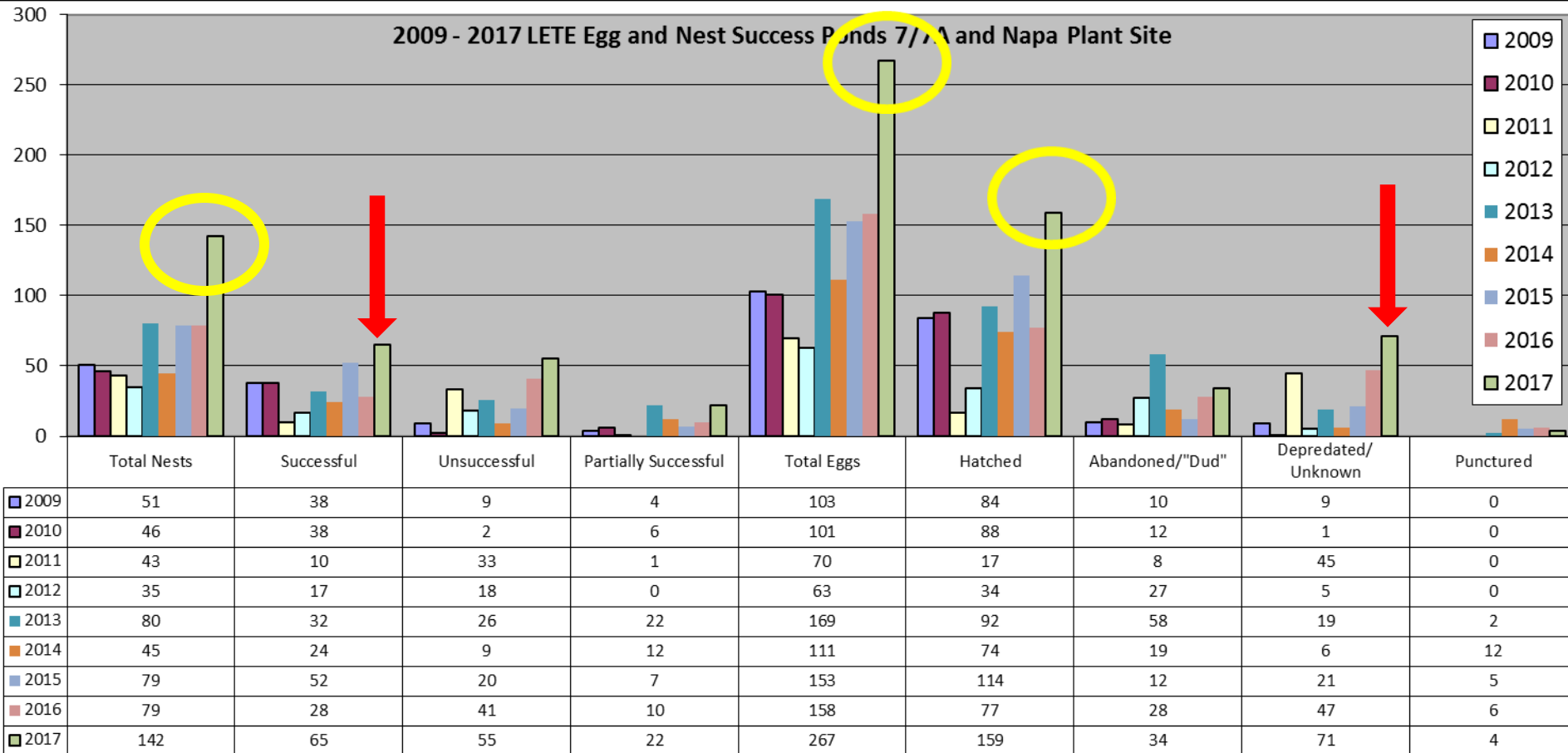
# Main Island- Napa Plant Site

## June 2015





2009 - 2017 LETE Egg and Nest Success Ponds 7/7A and Napa Plant Site



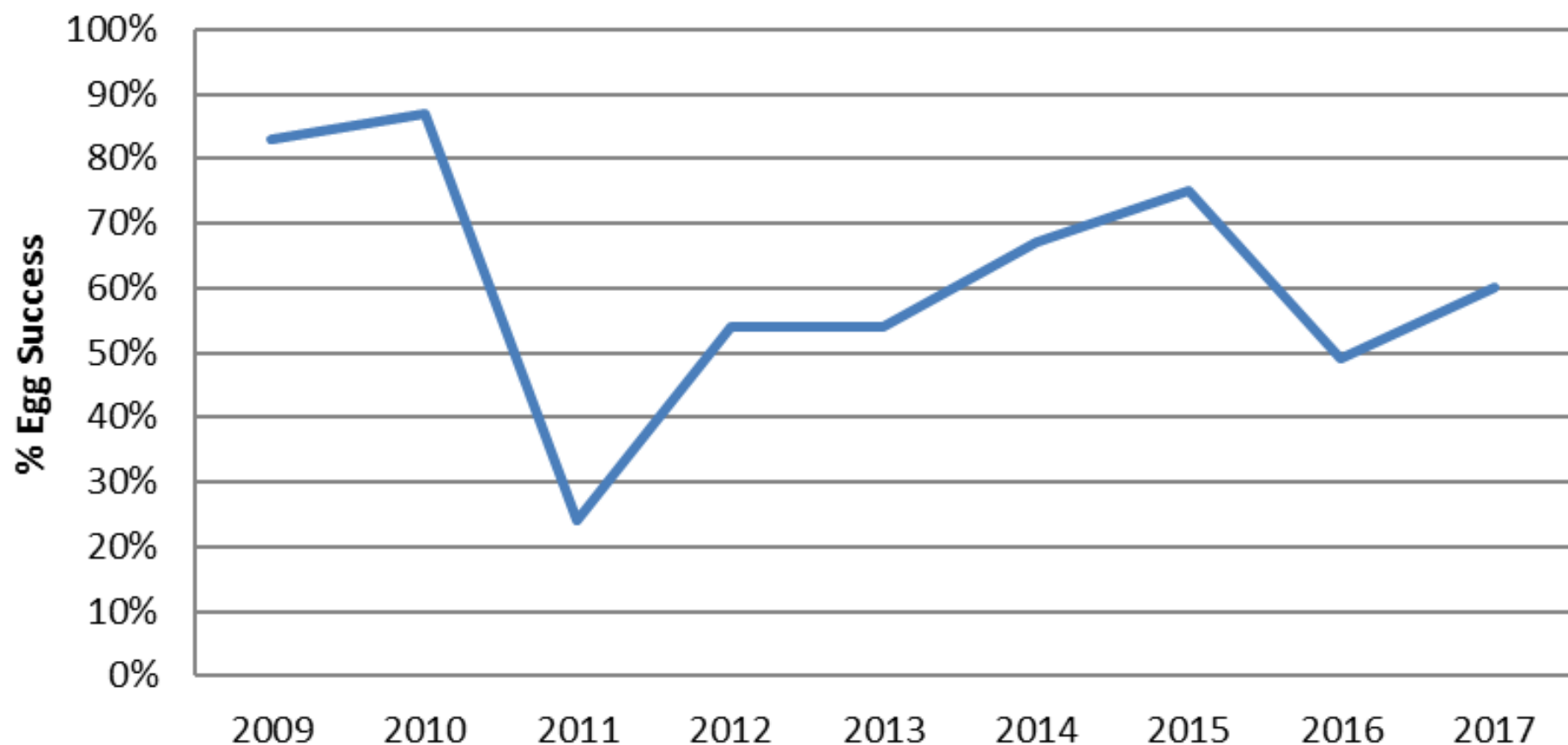
# July 20 2017

## LETE D-Day

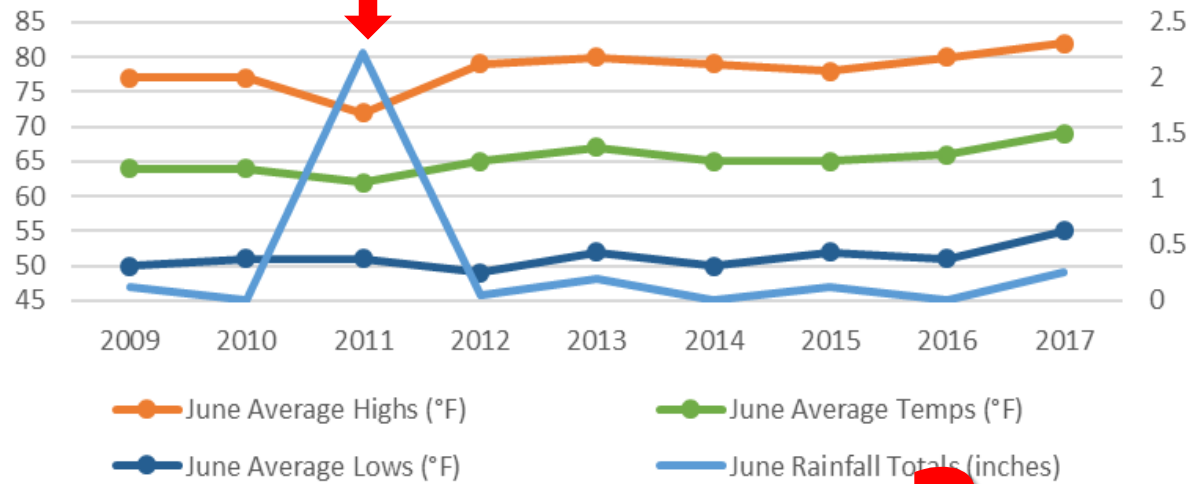




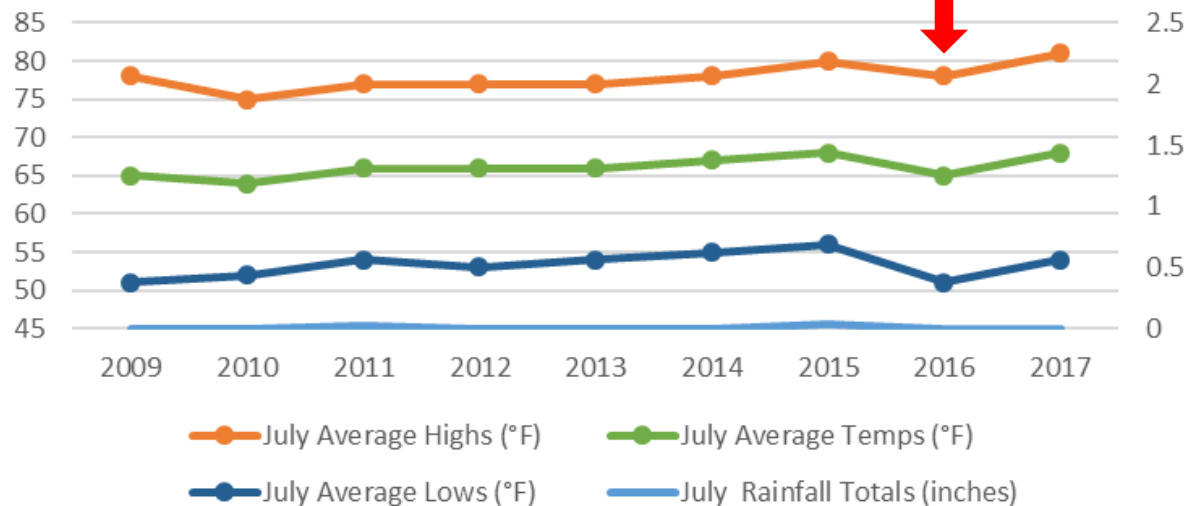
# NSMWA LETE Egg Percent Success in Years 2009-2017



## Temperature and Rainfall Averages for the Month of June

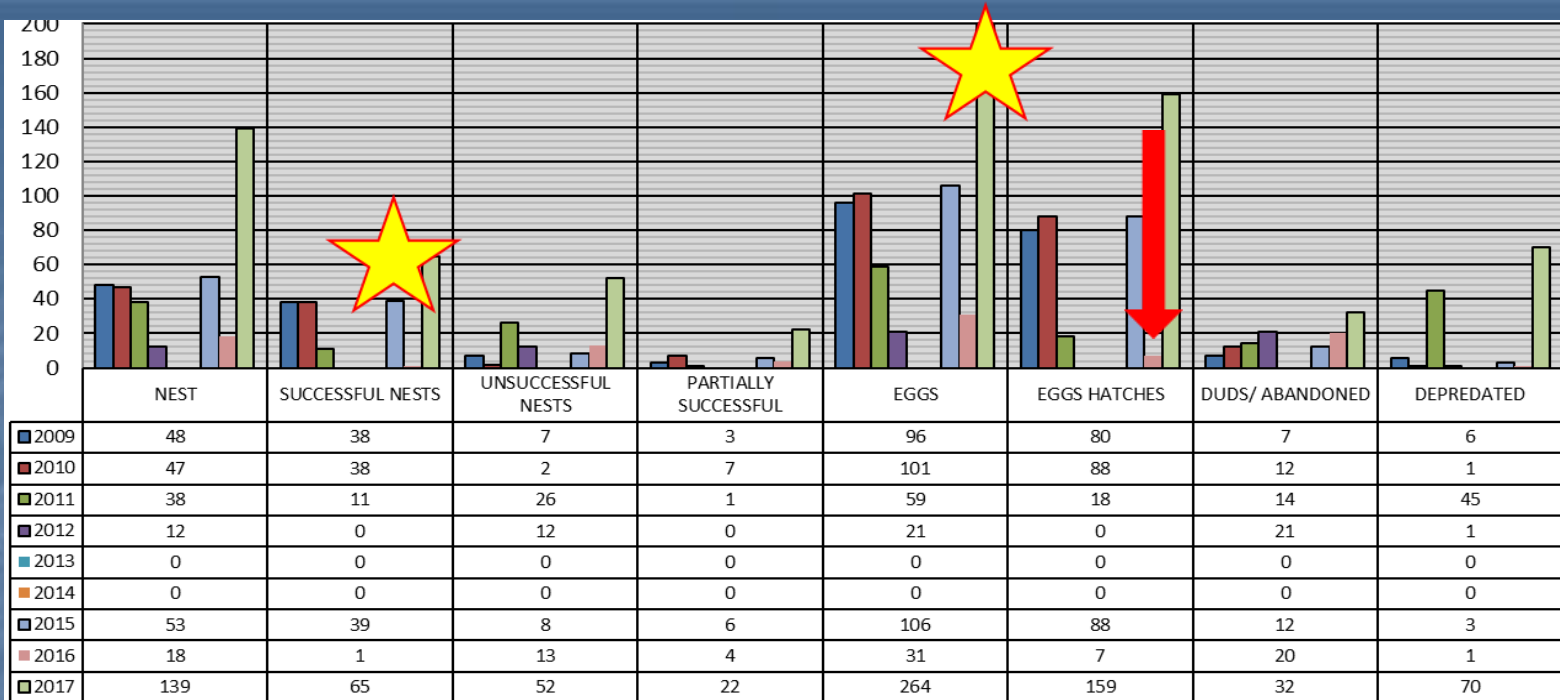


## Temperature and Rainfall Averages for the Month of July

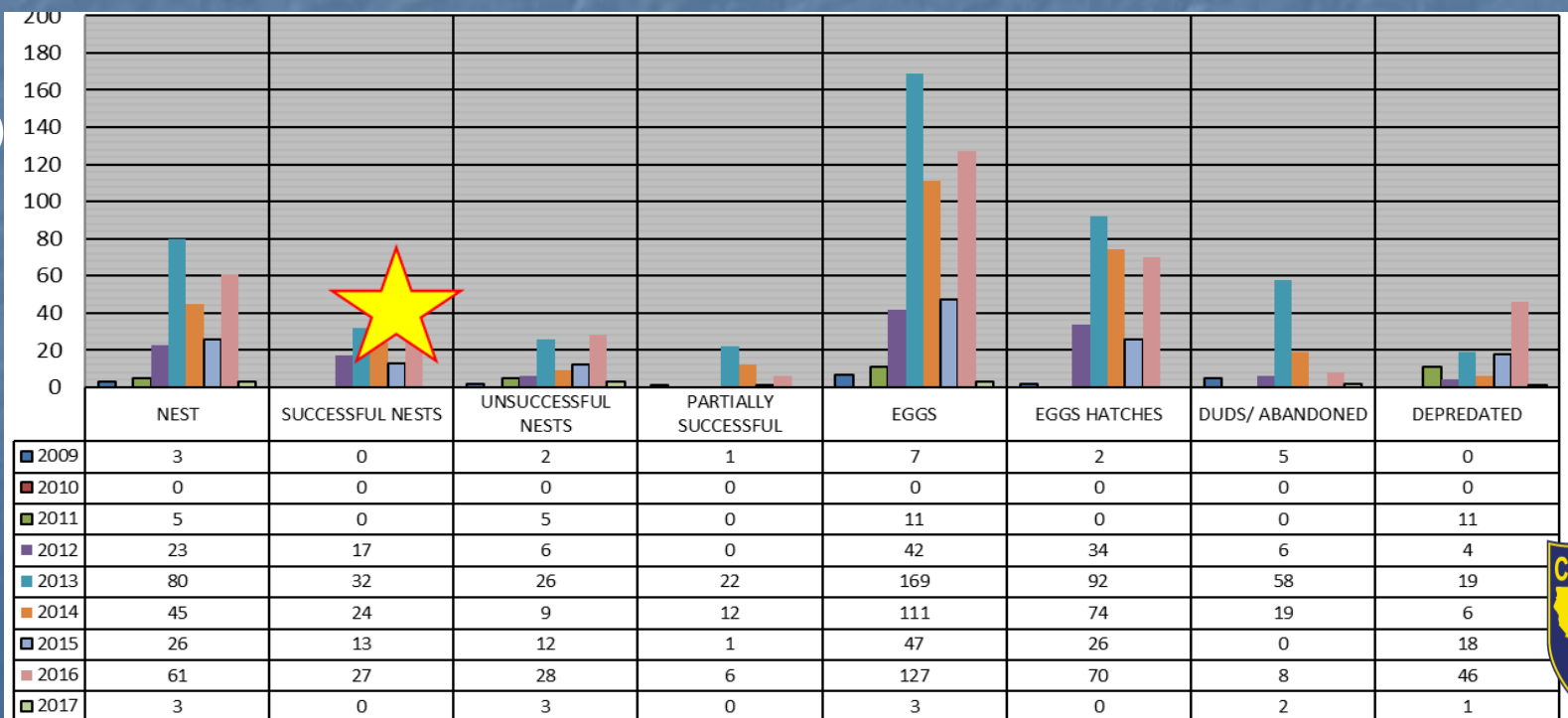




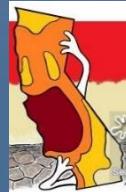
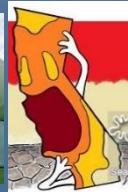
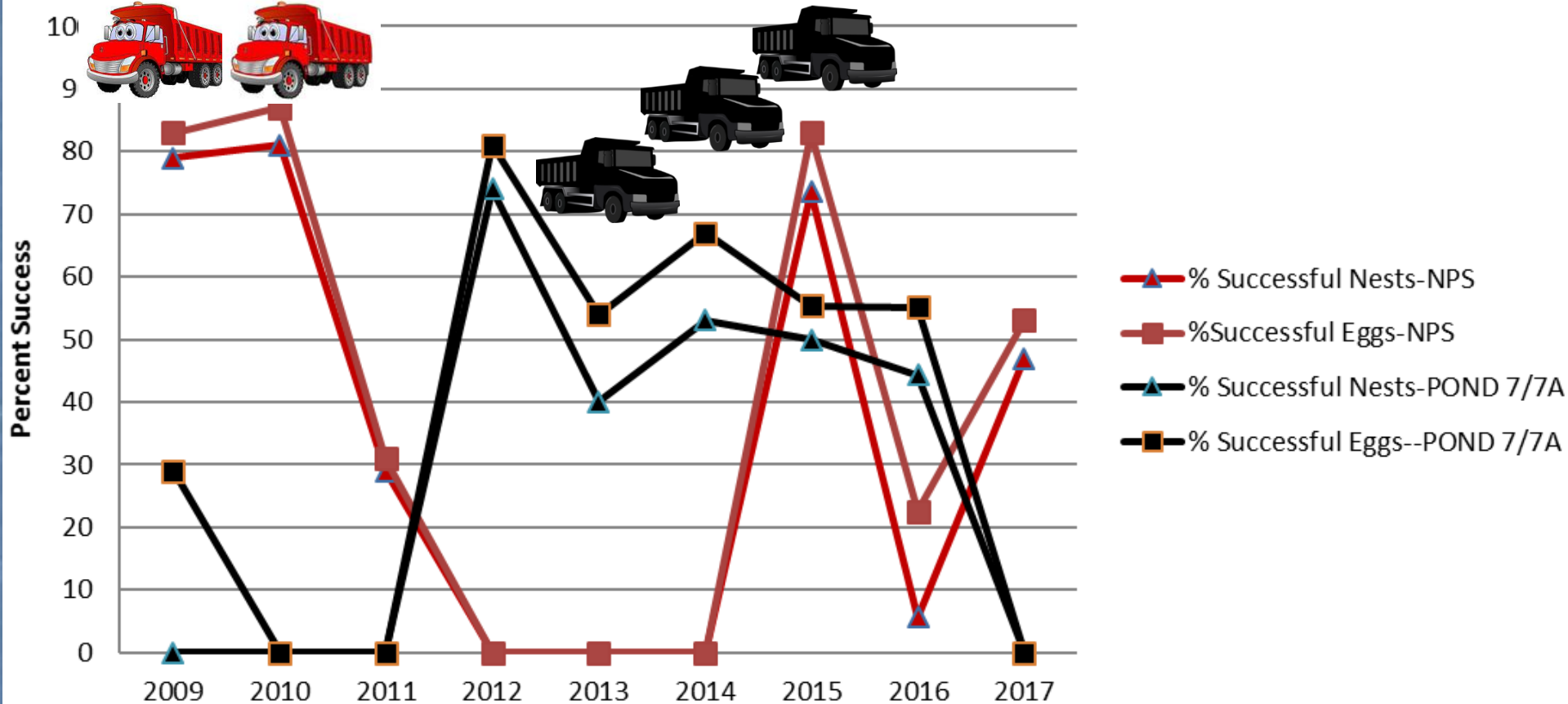
# NPS:



# POND 7/7A:



# Nest and Egg Success Rate 2009-2017





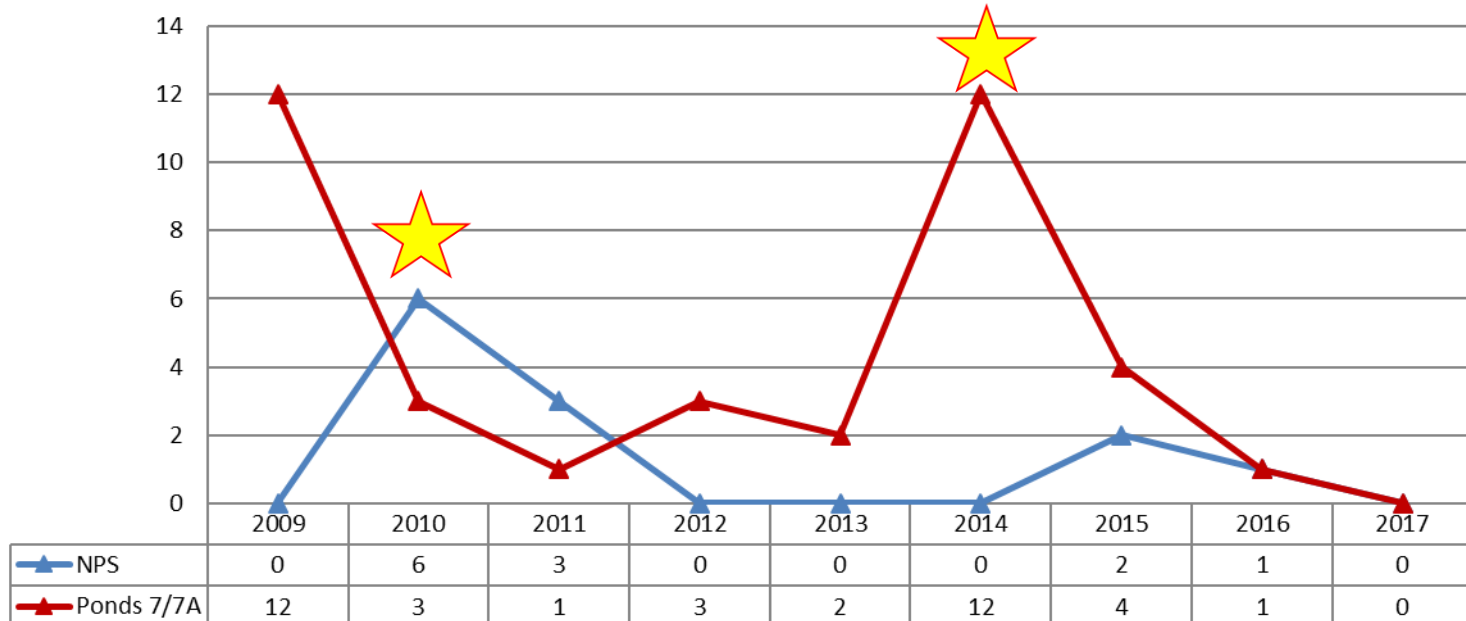


# Western Snowy Plover Nesting Activity

© 2015 Google



## 2009-2017 SNPL Nest Numbers by Location



## 2009-2017 SNPL Egg Numbers by Location





# SNPL Summary

- NPS habitat islands and Pond 7/7A had no SNPL egg production in 2017
- NSMWA SNPL appear to show a similarity to success and construction activity.



# LETE Summary

- Unclear why LETE choose NPS vs Pond 7/7A for the primary nesting site from one year to the next.
- In 9 years of surveys, 2015 was the only year where both locations were fairly successful in the same year.
- NSMWA LETE tend not to do well in unseasonably cooler/wetter years (2011)
- NSMWA LETE tend to do well in drought years
- Overall, NSMWA LETE 2017 Breeding Season- fairly successful in high numbers, however there were more unsuccessful/depredated eggs ever recorded.





Questions?



# Nest Totals and Result Comparisons 2009-2017

